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DT15 Re CT/PTO 23 FEB 2005

**THOMPSON ♦ LAMBERT LLP**

PATENT AND TRADEMARK LAWYERS

Our File No. 1208-11wo

January 24, 2005

VIA FAX TO 011-41-22-740-1435

**International Bureau of WIPO**

34, chemin des Colombettes  
1211 Geneva 20,  
Switzerland

Dear Sirs:

Re: **INTERNATIONAL APPLICATION NO. PCT/CA 2003/01295**  
**INTERNATIONAL FILING DATE: August 22, 2003**  
**Title: Thermophotovoltaic Device**  
**APPLICANT: Alberta Research Council, Inc.**

The Applicant has received the International Search report dated November 23, 2004, and wishes to propose an amendment under Article 19 prior to the two month time limited prescribed by Rule 46.1. which expires on **January 23, 2005** in preparation for entering International Preliminary Examination. As January 23, 2005 falls on a Sunday, pursuant to Rule 80.5, the amendment is being submitted on January 24, 2005.

Please enter the following amendments:

Replace Claims pages 11 and 12 containing Claims 1 through 7 presently on file with new Claims page 11 containing Claims 1 through 6. Claim 1 has been amended with subject matter from former claim 3 incorporated.

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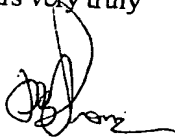
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**STATEMENT UNDER ARTICLE 19(1)**

Claim 1 has been amended to incorporate subject matter from former claim 3. It is noted that none of the known prior art teach a low conductivity space that is evacuated to place it under vacuum. It is believed that the claims as amended distinguish over all known prior art and, as such, are in a suitable condition for allowance.

Yours very truly



**DOUGLAS B. THOMPSON**  
Agent for the Applicant

DBT/  
Enclosures - 1 page

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THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE  
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

- 5
1. In a thermophotovoltaic device (10) having an energy source (12) compatible with thermophotovoltaic cells and thermophotovoltaic cells (14), the improvement comprising:  
a filter (16) adapted to filter out long wavelength energy positioned between the energy source and the thermophotovoltaic cells, the filter (16) having dual walls (30 & 32)  
10 with a low conductivity space (34) between the walls which is adapted to break the convection heat transfer path from the energy source (12) to the thermophotovoltaic cells (14).
  - 15 2. The thermovoltaiic device as defined in Claim 1, further including a dielectric filter (36) adapted to filter mid-wavelength energy positioned between the energy source (12) and the thermophotovoltaic cells (14).
  3. The thermovoltaiic device as defined in Claim 1, wherein the low conductivity space (34)  
20 is evacuated to place it under vacuum.
  4. The thermovoltaiic device as defined in Claim 1, wherein the dual walls (30 & 32) are of heat resistant glass.
  - 25 5. The thermovoltaiic device as defined in Claim 4, wherein the heat resistant glass is quartz.
  6. The thermovoltaiic device as defined in Claim 4, dual walls (30 & 32) are arranged as concentric tubes.
  - 30 7. The thermovoltaiic device as defined in Claim 1, the energy source being a burner with an

emitter (22, 24, 26, 28).